

**CLOSED
CITY OF HELENA LANDFILL
LICENSE NUMBER 90**

HYDROMETRICS

**FALL 1997 ANALYTICAL RESULTS AND
FIELD NOTES**

MARCH 1998

**IS LOCATED IN THE GROUNDWATER
MONITORING REPORTS ARCHIVE,
BOX NUMBER 3**

RECEIVED 3/10/1998

**CLOSED
CITY OF HELENA LANDFILL
LICENSE NUMBER 90**

HYDROMETRICS

**STATISTICAL EVALUATION OF NOVEMBER
1997 GROUNDWATER QUALITY DATA**

FEBRUARY 1998

**IS LOCATED IN THE GROUNDWATER
MONITORING REPORTS ARCHIVE,
BOX NUMBER 3**

RECEIVED 3/10/1998

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**CLOSED
CITY OF HELENA LANDFILL
LICENSE NUMBER 90**

HYDROMETRICS

**STATISTICAL EVALUATION OF MAY 1997
GROUNDWATER QUALITY DATA**

AUGUST 1997

**IS LOCATED IN THE GROUNDWATER
MONITORING REPORTS ARCHIVE,
BOX NUMBER 3**

RECEIVED 10/3/1997

**CLOSED
CITY OF HELENA LANDFILL
LICENSE NUMBER 90**

HYDROMETRICS

**SPRING 1997 ANALYTICAL RESULTS AND
FIELD NOTES**

JULY 1997

**IS LOCATED IN THE GROUNDWATER
MONITORING REPORTS ARCHIVE,
BOX NUMBER 3**

RECEIVED 7/28/1997

INITIALS ETC DATE 9/8/97
SOLID WASTE PROGRAM ROUTE SLIP

☐ **NEW APPLICATION**

Initial / Date

Rick T.

Pat C.

Nancy (Proof)

Cathy

Jon D.

☐ **NEW LICENSE**

Initial / Date

Rick T.

Pat C.

Nancy (Proof)

Carol

Cathy

Jon D.

☐ **HEALTH OFFICER CARD**

Initial / Date

Rick T.

Carol

Cathy

☐ **INSPECTIONS**

Initial / Date

Pat C.

Nancy (Proof)

Carol

Jon D.

☐ **INTERIM CLOSURES**

Initial / Date

Rick T.

Pat C.

Nancy (Proof)

Carol

Cathy

Jon D.

☐ **CLOSURES**

Initial / Date

Rick T.

Pat C.

Nancy (Proof)

Carol

Cathy

Jon D.

☐ **CHANGE IN LICENSE
FOR FEE STATUS**

Initial / Date

Rick T.

Pat C.

Nancy (Proof)

Cathy

☐ **COMPLAINTS**

Initial / Date

Pat C.

Nancy (Proof)

Carol (filing & DBase)

☐ **GENERAL CORRESPONDENCE**

Initial / Date

Pat C. / Rick T.

Nancy (Proof)

Jon D. (As Needed)

☒ **MISCELLANEOUS**

Initial / Date

Jan S

Jan D

9/10

9/15

DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMITTING & COMPLIANCE DIVISION

COMMUNITY SERVICES BUREAU

MARC RACICOT, GOVERNOR

Metcalf Building



STATE OF MONTANA

Phone: (406)444-4400

Fax: (406)444-1374

PO Box 200901

Helena, MT 59620-0901

September 8, 1997

Will Selser
Manager, Solid Waste Services
Lewis and Clark Public Works Department
3402 Cooney Drive
Helena, MT 59602

Dear Will:

I have re-read the correspondence from Ms. Potts, Mr. Kapsi and Mr. Crowley concerning ground water monitoring activities at the Lewis and Clark County's two landfills. While there have been lengthy technical discussions about the practical quantitation limits and reporting limits, at no time did they mean to imply that the laboratory was unsuitable or that the county was "shopping around" for a lab. The discussions on the statistics and how to handle the "detected-but-not-quantified" versus the "non-detect" values will be addressed in an upcoming EPA course that Mr. Crowley will attend. Once he returns, we should have the information in hand, and will relay it to you.

Thank you for submitting the updated Maxim Technologies Chemistry Laboratory Quality Assurance Manual. I am having it reviewed for approval. Only one copy is needed and we will use this as a general reference for the Maxim Lab. In the mean time, please do not delay any scheduled sampling events at either landfill.

If you have any further questions on this matter, please feel free to contact me. My direct phone line is 406-444-2409.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Dilliard".

Jon Dilliard
Bureau Chief

Path: CB5403\wp\landfill\grndwatr\l&c\pql2

INITIALS _____ DATE 4/10/97
SOLID WASTE PROGRAM ROUTE SLIP

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Nancy (Proof)

Jon D. (As Needed)

☒ MISCELLANEOUS

Grd Wtr

Initial / Date

Proof

Pat Crowley

Mailed

ND 4/10/97

PC 4/11/97

ND 4/14/97

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*Lewis + Clark
#90 (inactive)*

2-5

DEPARTMENT OF ENVIRONMENTAL QUALITY
PERMITTING & COMPLIANCE DIVISION
SOLID WASTE PROGRAM

MARC RACICOT, GOVERNOR

Metcalf Building



STATE OF MONTANA

Phone: (406)444-4323
Fax: (406)444-1374

PO Box 200901
Helena, MT 59620-0901

April 10, 1997

Ted Hill
City of Helena
316 North Park
Helena, Montana 59623

**RE: CITY OF HELENA CLASS II LANDFILL (INACTIVE), LEWIS AND CLARK
COUNTY - LICENSE NO. 90**

RECEIPT OF FALL/NOVEMBER 1996 GROUND WATER MONITORING RESULTS

Dear Mr. Hill:

The results from the Fall/November 1996 ground water monitoring event conducted at the City of Helena Class II (inactive) Landfill were received on March 5, 1997 by the Program. This letter acknowledges:

- * The receipt of the ground water monitoring report and analytical laboratory data sheets, and
- * The adequacy of this data submittal according to the reporting requirements set forth in Title 17, Chapter 50, Subchapter 7, Administrative Rules of Montana (ARM).

As we discussed over the phone on April 10, 1997, the Program's most recent concern since the receipt of the Fall 1996 ground water analytical data, is focused on the area northwest of the landfill in the vicinity of ground water monitoring well HL-90-1. The concentration of tetrachloroethene in this well has nearly doubled since the Spring/May 23, 1996 event (from 9.3 µg/L, to 18 µg/L). The next ground water monitoring well(s) located hydraulically downgradient from HL-90-1 would be the irrigation wells at the golf course (i.e., I-2 and I-4). The Program's records show that these wells have not been sampled since August 1994 (last sample). These wells should be sampled as soon as possible for VOCs in Table 1 ARM 17.50.708, to determine the current extent of contamination.

STATE OF MONTANA

TO THE PEOPLE OF THE STATE OF MONTANA

WE GREET YOU WITH A WARM WELCOME

WATER QUALITY MONITORING PROGRAM

WATER QUALITY MONITORING PROGRAM

WATER QUALITY MONITORING PROGRAM

WATER QUALITY MONITORING PROGRAM

WATER QUALITY MONITORING PROGRAM

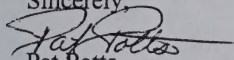
WATER QUALITY MONITORING PROGRAM

Ted Hill
Page 2
April 10, 1997

Along the east property boundary of the landfilled area, ground water monitoring well EPA-1 had been showing a gradual trend in reduced tetrachloroethene concentrations since December 1993. This well may now be reaching stabilization with tetrachloroethene concentrations remaining at 19 µg/L for the entire year of 1996. This concentration is still in excess of the maximum contaminant level (MCL) (5 µg/L) for tetrachloroethene.

The City of Helena Landfill will remain in Assessment Monitoring until the initially approved Corrective Measures (i.e., landfill gas extraction) is implemented and determined to be effective. Presently, without implementation of the chosen remedy or any other corrective action to remediate the contamination in the ground water to date, chemical contaminants continue to persist in the ground water beneath and downgradient from the licensed area. Please submit a current corrective measures implementation schedule to the Department.

Sincerely,



Pat Potts

Environmental Specialist

cc: Steve Downs, Hydrometrics, Inc., 2727 Airport Road, Helena, MT 59601
Kim Milburn, City of Helena, 316 North Park Avenue, Helena, MT 59623
Bill Verwolf, City of Helena Manager, 316 N. Park Ave.,
Helena, MT 59623
Vivian Drake, City-County Building, 316 North Park Ave., P.O. Box 1723, Helena, MT 59624

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File: Lewis and Clark Co./City of Helena/grd wtr (corr)

